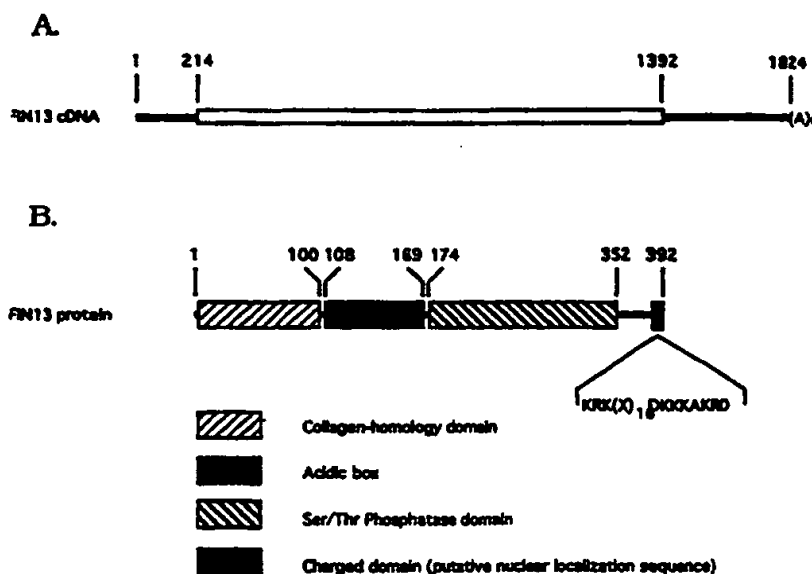




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁶ : C12N 15/55, 9/16, 15/85, 15/86, 15/72, A61K 48/00, 31/70, 38/46, C07H 21/04, C07K 16/40, G01N 33/573, C12Q 1/68, C12N 15/62, C07K 19/00, C12N 1/21, 5/10 // (C12N 1/21, C12R 1:19)</p>	A1	<p>(11) International Publication Number: WO 97/35018</p> <p>(43) International Publication Date: 25 September 1997 (25.09.97)</p>
<p>(21) International Application Number: PCT/US97/05075</p> <p>(22) International Filing Date: 21 March 1997 (21.03.97)</p> <p>(30) Priority Data: 08/622,339 21 March 1996 (21.03.96) US 60/013,792 21 March 1996 (21.03.96) US</p> <p>(71) Applicant: NEW YORK UNIVERSITY [US/US]; 70 Wash- ington Square South, New York, NY 10012 (US).</p> <p>(72) Inventors: GUTHRIDGE, Mark, A.; Apartment 4F, 229 Lex- ington Avenue, New York, NY 10016 (US). BASILICO, Claudio; 110 Bleeker Street, New York, NY 10023 (US).</p> <p>(74) Agents: FEHLNER, Paul, F. et al.; Klauber & Jackson, 411 Hackensack Avenue, Hackensack, NJ 07601 (US).</p>		<p>(81) Designated States: AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>

(54) Title: GROWTH FACTOR INDUCIBLE SERINE/THREONINE PHOSPHATASE FIN13



(57) Abstract

A serine/threonine, FIN13, which includes a collagen-homology domain, an acidic box domain, a catalytic domain, and a putative nuclear translocation sequence. The present invention further relates to the modulation of cellular proliferation, by regulating the activity of the novel serine/threonine phosphatase. Thus, the invention provides the phosphatase, nucleic acids encoding the phosphatase, oligonucleotides specific for such nucleic acids, antibodies to the phosphatase, and method for increasing (or decreasing) the activity of the phosphatase to inhibit (or enhance) cellular proliferation and, thus, tissue growth. Various diagnostic and therapeutic aspects of the invention particularly relate to detection and treatment of hyperproliferative disorders, neoplasms, and tumors. In specific examples, FIN13 is expressed in proliferating cells, notably germ cells of the testes. Increased levels of expression of FIN13 in transfected cells results in a decrease in the cell growth rate.